

RAW SEQUENCE LISTING

DATE: 07/30/2001

PATENT APPLICATION: US/09/485,421

TIME: 16:07:28

Input Set : A:\Upap0350.app

Output Set: N:\CRF3\07302001\I485421.raw

3 <110> APPLICANT: Ayyavoo, Velpandi
4 Patel, Mamata
5 Kieber-Emmons, Thomas
6 Weiner, David B.
7 Mahalingam, Sundaramy
9 <120> TITLE OF INVENTION: Functional Fragments of HIV-1 VPR Protein and Methods
10 of Using the Same
12 <130> FILE REFERENCE: UPAP0350
14 <140> CURRENT APPLICATION NUMBER: 09/485,421
C--> 15 <141> CURRENT FILING DATE: 2000-10-05
17 <150> PRIOR APPLICATION NUMBER: 60/055,754
18 <151> PRIOR FILING DATE: 1997-08-14
20 <160> NUMBER OF SEQ ID NOS: 18
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
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27 <213> ORGANISM: Artificial Sequence
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36 Asp Trp Thr Leu Glu Leu Leu Glu Glu Leu Lys Asn Glu Ala Val Arg
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39 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu
40 35 40 45
42 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu
43 50 55 60
45 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg
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67 Lys His Phe Asp Pro Arg Leu Leu Thr Ala Leu Gly Asn His Ile Tyr
68 35 40 45
70 Asn Arg His Gly Asp Thr Leu Glu Gly Ala Gly Glu Leu Ile Arg Ile

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71      50      55      60
73 Leu Gln Arg Ala Leu Phe Met His Phe Arg Gly Gly Cys Ile His Ser
74 65      70      75      80
76 Arg Ile Gly Gln Pro Gly Gly Gly Asn Pro Leu Ser Ala Ile Pro Pro
77      85      90      95
79 Ser Arg Ser Met Leu
80      100
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93 1      5      10      15
95 Thr Ile Glu Glu Ala Phe Asp Trp Leu Asp Arg Thr Val Glu Ala Ile
96      20      25      30
98 Asn Arg Glu Ala Val Asn His Leu Pro Arg Glu Leu Ile Phe Gln Val
99      35      40      45
101 Trp Gln Arg Ser Trp Arg Tyr Trp His Asp Glu Gln Gly Met Ser Arg
102      50      55      60
104 Ser Tyr Thr Lys Tyr Arg Tyr Leu Cys Leu Met Gln Lys Ala Val Phe
105 65      70      75      80
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127      20      25      30
129 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu
130      35      40      45
132 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu
133      50      55      60
135 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg
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155          20          25          30
157 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu
158          35          40          45
160 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu
161          50          55          60
163 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg
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185 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu
186          35          40          45
188 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu
189          50          55          60
191 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg
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211          20          25          30
213 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu
214          35          40          45

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216 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu
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219 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg
220 65                      70                      75                      80
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223      85                      90                      95
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231 <212> TYPE: PRT
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239 1      5      10      15
241 Asp Trp Thr Leu Glu Leu Leu Glu Glu Leu Lys Asn Glu Leu Val Arg
242      20      25      30
244 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu
245      35      40      45
247 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu
248      50      55      60
250 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg
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270      20      25      30
272 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu
273      35      40      45
275 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Pro Leu Ile Arg Ile Leu
276      50      55      60
278 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg
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291 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence

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300 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu

301 35 40 45

303 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ser Leu

304 50 55 60

306 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg

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328 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu

329 35 40 45

331 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu

332 50 55 60

334 Gln Gln Ser Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg

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356 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu

357 35 40 45

359 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu

360 50 55 60

362 Gln Gln Leu Ser Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg

VERIFICATION SUMMARY

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L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date